Find all discontinuities. Then explain the intervals of continuity for each function:

1. 2. 3.

Find the x values (if any) where the function is discontinuous. State whether the discontinuities are removable or non- removable.

4.

5.

6.

7.

8. Sketch the graph of any function such that and . Is your function continuous at x=3?

9. Describe the difference between a discontinuity that is removable and one that is non-removable.

10. Find a function that has a removable discontinuity at x = 2 and a non-removable discontinuity at x = -1.